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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,112	11/29/2000	Timo J. Narumo	200357US2	8756

			EXAMINER
22850	7590	08/11/2004	HAMILTON, LALITA M

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ALEXANDRIA, VA 22314

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/725,112	NARUMO, TIMO J.
	Examiner	Art Unit	
	Lalita M Hamilton	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-15_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-15_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____ .
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because in line 1, the indentation is incorrect, and in line 4, before "only", the word "the" should be placed. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: The disclosure should be double-spaced.

Appropriate correction is required.

Claims 1-15 are objected to because of the following informalities: In claims 1, 3, and 5, "analysing" should be "analyzing" and "modelled" should be "modeled". In claim 13, "utilised" should be "utilized". In claim 15, "computerised" should be "computerized". In claim 13, listing using hyphens is improper. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected for the following reasons:

In claim 1, "historical data" lacks antecedent basis.

In claim 2, "historical stock data" lacks antecedent basis.

In claim 2, "wave-like" is vague and indefinite.

In claims 11 and 13, the use "e.g." renders the claim vague and indefinite and its use in the claim is improper.

Regarding claim 12, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 13, "downloaded data" lacks antecedent basis.

In claim 14, "viz." renders the claim indefinite.

In claim 15, "clients' side requests" lacks antecedent basis.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3-5, and 7-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, *or* composition of matter, *or* any new and useful improvement thereof" (emphasis added).

Claims 1, 3-5, and 7-15 claim a computer program. However, the preamble and the body of the claim do not indicate that the program is stored on a medium. Appropriate correction is required.

In order to over come the 101 rejection above, the following preamble is suggested:

-computer-readable medium implementing the steps of ---, or something similar. Also, in the body of the claim include structural / functional interrelationship which can only be computer executable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Rebane

(6,405,179).

Rebane discloses a method and corresponding computer program and system

comprising determining a timing for buying and selling stock securities, including a

computer program for collecting and analyzing historical stock security data including

share price and associated volume data, wherein said data of each security are

modeled by said computer program into a probability distribution of historical stock

security data, wherein a confidence interval for a security price is determined on the

basis of statistical mathematical formulae incorporated in said computer program, and in

that said program, on the basis of a comparison between said probability distribution of

said historical data and an actual security price provided to said computer program,

thereby determining the relative location of said actual price in said probability

distribution, provides a recommendation in the form of, at least effectively relating to,

one of at least a "buy", a "sell" and a "hold" recommendation (col.12, line 60 to col.13,

line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); probability distribution of said

historical stock data of a security is analyzed and modeled in accordance with a wave-like fluctuation of the stock price, having a determined wavelength and amplitude, preferably by the application of a Fast Fourier Transform (FFT) method performed by said computer program (col.12, line 60 to col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all—inherent that any application that is capable of carrying out the functions may be utilized); the historical price data of a security are modeled into day prices by a recalculation of lowest and highest prices of a particular day together with opening and closing prices of that day into one effective day price, each said effective day price component being incorporated in said calculation on a predetermined weighing basis (col.12, line 60 to col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); historical stock data taken into consideration for the purpose of establishing a probability distribution are part of a history window selected backwardly in time from a most recent history point within a larger range of available historical stock security data, the history window being selected by an analysis of the historical security data using spectral analysis, preferably based on a Fourier transform, such that if the security price under consideration has rapid short term fluctuations of larger amplitude than the fluctuations of a long term period, a relatively short history window is automatically selected, whereas if security price fluctuations over a long term period show significantly larger amplitudes than the short term fluctuations do, a relatively long history window is automatically selected (col.12, line 60 to col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); historical data are modeled into a probability distribution, preferably one of a Gamma and Gaussian distribution, utilizing mean and variance results of computer

calculations on volume weighed effective day prices (col.12, line 60 to col.13, line 49;

col.14, line 30 to col.15, line 59; and fig. 4-7-all); a computer readable medium

configured for executing the method (col.12, line 60 to col.13, line 49; col.14, line 30 to

col.15, line 59; and fig. 4-7-all); a computer executing, at least set immediately ready for

executing, the computer program (col.12, line 60 to col.13, line 49; col.14, line 30 to

col.15, line 59; and fig. 4-7-all); a data network service, in particular an Internet service,

applying a method on the basis of a risk level set by a user of said service through a

data network interface with a computer program running said method (col.12, line 60 to

col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); service is arranged for

providing a set of recommendations either directly or indirectly effective towards a

selling, buying and holding of a particular stock security (col.12, line 60 to col.13, line

49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); required historical security data are

updated at least daily, automatically by said computer program, for at least data of one

stock exchange (col.12, line 60 to col.13, line 49; col.14, line 30 to col.15, line 59; and

fig. 4-7-all); a data network service made available to a public (col.12, line 60 to col.13,

line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); a data network service relaying

means, such as an Internet Provider, including a computer and, in particular, including

an Internet providing arrangement, providing, at least relaying the computer program

and/or service (col.12, line 60 to col.13, line 49; col.14, line 30 to col.15, line 59; and fig.

4-7-all); a computer for analyzing stock data, wherein the following steps are performed

periodically in a predetermined frequency, by said computer the stock pace and volume

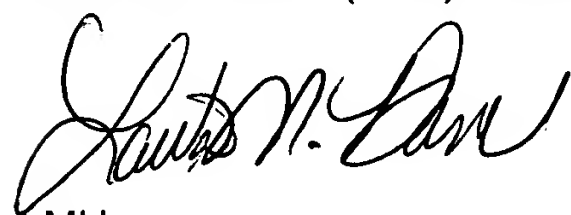information of any stock exchange listed securities are downloaded from a data

network, said stock price and volume information is transformed into appropriate

numerical data for a statistical calculation thereof, said downloaded data is appended to

a previous gathered data base of stock prices and volumes by said computer, a history

window is determined for statistical modeling for each security of said downloaded data

by a Fourier transform based spectral analysis, a wavelength of a most dominant

frequency component as said history window in stock days is selected, said price and

volume data is utilized to determine a probability distribution extending over said history

window for each security, a P-value of the most current security price is calculated on

the estimated probability distribution for each security, confidence limits of one of a

predetermined and a true performance statistics history optimized risk level a for each

security are determined, said calculated P-value is utilized to categorize a

recommendation of one of at least "buy°, "sell" and "hold" for each security (col.12, line

60 to col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); using said

confidence limits as an additional information to said recommendation, "the highest

price to buy" and "the lowest price to sell" limits, producing said calculated values for

each security in a format suitable for a relevant representation (col.12, line 60 to col.13,

line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all); and a computerized investment

timing management system which executes a method and serves the results in any

format the clients' side requests, that can be provided over the Internet (col.12, line 60

to col.13, line 49; col.14, line 30 to col.15, line 59; and fig. 4-7-all).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lalita M Hamilton whose telephone number is (703)

306-5715. The examiner can normally be reached on Tuesday-Thursday (8:30-4:30).

The fax phone number for the organization where this application or proceeding

is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

LMH